Application No.: 09/903,028

Amendment dated August 18, 2004

Reply to Office Action dated May 19, 2004

**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions, and listings, of claims in the

application.

**Listing of Claims:** 

Claim 1. (Original): A method for processing an image, comprising the steps of:

comparing a first image intensity associated with a subject image portion with a second

image intensity associated with an adjacent image portion;

determining an image intensity difference between the first image intensity and the

second image intensity;

classifying the subject image portion as a candidate edge portion in response to a ...

determination that the first image intensity is less than the second image intensity and a

determination that the image intensity difference is greater than a predetermined threshold image

intensity difference;

determining whether the candidate edge portion is a true edge portion; and

associating the subject image portion with a third image intensity, wherein the third

image intensity is less than the first image intensity.

Claim 2. (Original): The method of Claim 1, wherein the step of determining whether the

candidate edge portion is a true edge portion, comprises the step of determining whether the

candidate edge portion is adjacent to at least one second candidate edge portion.

Claim 3. (Original): The method of Claim 2, wherein the step of determining whether the

candidate edge portion is a true edge portion, further comprises the step of determining whether

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the candidate edge portion is adjacent to the second candidate edge portion and to a third

candidate edge portion.

Claim 4. (Currently Amended): The method of Claim [[4]] 3, wherein the candidate edge

portion, the second candidate edge portion and the third candidate edge portion form a line.

Claim 5. (Original): The method of Claim 1, wherein the image is a digitized image.

Claim 6. (Original): The method of Claim 5, wherein the subject image portion is a pixel.

Claim 7. (Original): The method of Claim 5, wherein the adjacent image portion is a pixel.

Claim 8. (Original): The method of Claim 5, wherein the image is a frame of a video stream.

Claim 9. (Original): The method of Claim 8, wherein the image intensity is measured in

luminance.

Claim 10. (Original): The method of Claim 8, wherein the image intensity is measured in

luminance and chrominance.

Claim 11. (Original): The method of Claim 1, wherein the image is an image-type selected from

the group consisting of:

animation;

computerized banners;

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real-time streaming video;

stored video; and

gaming graphics.

Claim 12. (Original): A system for enhancing a digitized image, comprising:

a decoder operative to receive an encoded digitized image and to expand the encoded

digitized image to generate a decoded digitized image;

a post-processing unit operative to filter the decoded digitized image to process an image

flaw;

an edge enhancer operative to detect an edge in the decoded digitized image and to

enhance the edge in the decoded digitized image.

Claim 13. (Original): The system of Claim 12, wherein the edge is a portion of the decoded

digitized image separating a first image portion of substantially uniform image intensity from a

second image portion of substantially uniform image intensity.

Claim 14. (Original): The system of Claim 12, wherein the edge is a line in the decoded

digitized image.

Claim 15. (Original): The system of Claim 12, wherein the edge enhancer is further operative to

detect the edge by comparing a subject portion of the decoded digitized image with a first

adjacent portion of the decoded digitized image and with a second portion of the decoded

digitized image and determining that the subject portion is associated with a lower image

intensity level than a first image intensity associated with the first adjacent portion of the

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decoded digitized image and a second image intensity associated with the second adjacent

portion of the decoded digitized image.

Claim 16. (Original): The system of Claim 12, wherein the post-processor removes the image

flaw from the decoded digitized image, in response to a determination that an image intensity

of a pixel associated with the image flaw does not differ from at least one surrounding pixel by

more than a threshold value.

Claim 17. (Original): The system of Claim 12, wherein the post-processor adjusts the image

flaw in the decoded digitized image, by modifying an image intensity of a pixel associated

with the image flaw to correspond to a median image intensity value of at least one

surrounding pixel.

Claim 18. (Original): A method for detecting and enhancing an edge in a decoded digitized

image, comprising the steps of:

determining a first image intensity associated with a first pixel in the decoded digitized

image;

determining a second image intensity associated with a second pixel in the decoded

digitized image;

determining a third image intensity associated with a third pixel in the decoded

digitized image;

classifying the first pixel as a first candidate edge pixel in response to a determination

that the first image intensity is less than the second image intensity and is less than the third

image intensity;

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determining whether the first pixel is adjacent to a second candidate edge pixel;

determining whether the second pixel is adjacent to a third candidate edge pixel;

classifying the first pixel as a true edge pixel in response to a determination that the

first pixel is adjacent to the second candidate edge pixel and the second candidate edge pixel is

adjacent to the third candidate edge pixel;

associating a fourth image intensity with the first pixel, the fourth image intensity being

lower than the first image intensity.

Claim 19. (Original): The method of Claim 18, further comprising the steps of:

associating a fifth image intensity with the second pixel, the fifth image intensity being

higher than the second image intensity; and

associating a sixth image intensity with the third pixel, the sixth image intensity being

higher than the third image intensity.

Claim 20. (Original): The method of Claim 18, further comprising the steps of:

determining a background color associated with the first pixel;

determining a quality level of the digitized image; and

selecting the fourth image intensity based on the background color and the quality

level.

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